



**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information**

Subwatershed: Unnamed Tributary

Location of Catchment Centroid on ADC Map: Year: 2000 Page: 17 Grid: J8

State Plane Coordinates of Outfall Location: X: 1398104 Y: 482310

Closest Road Intersection to Outfall: Priest Bridge Drive and Espey Court

Outfall SDI ID or Outfall Description: unknown

Objective: Demonstration / Impairment(s) (Sheet 1) \_\_\_\_\_

Drainage Area (ac): 3.4 Impervious Area (ac): 3.1

Percent Impervious: 91% Soil Recharge Factor (S): 0.38

WQ<sub>v</sub> (required): 0.25 Re<sub>v</sub> (required): 0.09

Predominant Land Use: commercial Mean Depth to Ground Water: unknown

Sanitary System:  Septic  Municipal Sewer Water Supply:  On Site Well  Public Water

**Storm Drainage System Within Catchment**

Piped: 100% Open Channels: 0%

Area Drained by System: 100%

Location in Catchment:  Headwaters  Middle  Lower  All

Open Channel Lining- Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)**

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

SDI ID: \_\_\_\_\_ Type (number from Sheets 4 & 5): \_\_\_\_\_ Age: \_\_\_\_\_

Closest Road Intersection to IMP / BMP: \_\_\_\_\_

Catchment Area Treated (ac) : \_\_\_\_\_ Percentage Catchment Treated: \_\_\_\_\_

WQ<sub>v</sub> Provided:  YES  NO Re<sub>v</sub> Provided:  YES  NO C<sub>p</sub> Provided:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 1 -- Catchment Information (concluded)**

<b>CATCHMENT SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.074</u>	Re <sub>v</sub> (provided) :	<u>0.074</u>
Area Treated (ac):	<u>1.94</u>	Impervious Area Treated (ac):	<u>1.68</u>
Area Treated (%):	<u>57%</u>	Impervious Area Treated (%):	<u>54%</u>

**Comments**

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**

Site Name: Priest Bridge Buildings Address: 2121, 2125 Priest Bridge Dr & 2129 Baldwin Av

Site Owner: \_\_\_\_\_

State Plane Coordinates of Site Centroid: X: 1398526 Y: 482243 Date: 5/29/03

Personnel: PM Weather: overcast, 65F deg

Area (ac): 3.3 Impervious Area (ac): 3.1

Percent Impervious: 96% Soil Recharge Factor (S): 0.38

WQ<sub>v</sub> (required): 0.25 Re<sub>v</sub> (required): 0.09

Property Area (ac): 3.6 Property Area Included in Site: 89%

Amount of Catchment Occupied by Site: 100%

**Storm Drainage System Within Site**

Piped: 100% Open Channels: 0% Area Drained by System: 90%

Open Channel Lining - Vegetation: 0% Riprap: 0% Concrete: 0% Other: 0%

**Existing IMP(s) / BMP(s)** (Identified on Page 1, FORM 1, Catchment Information)

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

SDI ID: \_\_\_\_\_ Condition:  Excellent  Good  Average  Fair  Poor

**Site Information**

Type of Pavement:  Bituminous  Concrete  Gravel  Grid Pavers  Other \_\_\_\_\_

Pavement Condition:  Excellent  Good  Average  Fair  Poor

Underdrains can be easily directed to existing storm drains or daylighted:  YES  NO

Gutter/Exterior Downspouts Present:  YES  NO (see comments)

Roof Connected Directly to Storm Drain:  YES  NO (see comments)

Roof Drains onto Impervious Surface:  YES  NO

Obvious Existing Drainage Problems:  Extensive  Moderate  Average  Limited  None

Steep Slopes Present:  Extensive  Moderate  Average  Limited  None

Existing Landscaping:  Extensive  Moderate  Average  Limited  None

Mature / Specimen Trees:  Extensive  Moderate  Average  Limited  None

Area Available for Aboveground BMPs:  Extensive  Moderate  Average  Limited  None

Existing Cover of Potential Aboveground BMP Locations:  Grass  Landscaped  Gravel  Other Pervious  
 Pavement  Other Impervious

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information (concluded)**

**Commercial / Institutional**

Islands Present:  YES  NO

Curb Present Around Island:  YES  NO

Ground Level of Island Relative to Pavement:  Above  Equal  Below

Island Landscaping:  Impervious  Bare Earth  Gravel  Grass  Mulch  Herbaceous Plants  Shrubs  
 Trees (<2 in. DBH)  Trees (2 - 6 in. DBH)  Trees (>6 in. DBH)

Trees have sufficient spacing to allow IMPs  YES  NO

Parking area that can be directed to potential treatment area with little grading: 60%

<b>SITE SUMMARY</b>			
WQ <sub>v</sub> (provided) :	<u>0.074</u>	Re <sub>v</sub> (provided):	<u>0.074</u>
Area Treated (ac) :	<u>1.94</u>	Impervious Area Treated (ac):	<u>1.68</u>
Area Treated (%) :	<u>59%</u>	Impervious Area Treated (%):	<u>54%</u>

**Photographs**

No. <u>253</u>	Description: <u>looking east along southern portion of property</u>
No. <u>254</u>	Description: <u>looking north along western portion of property</u>
No. <u>255</u>	Description: <u>looking east along northern portion of property</u>
No. <u>256</u>	Description: <u>looking south along western portion of property</u>
No. <u>257</u>	Description: <u>looking east along northern portion of 2125 and 2121</u>
No. <u>258</u>	Description: <u>looking south between buildings</u>
No. <u>259</u>	Description: <u>looking south along east side of property</u>
No. <u>260</u>	Description: <u>looking west along north side of property</u>
No. <u>261</u>	Description: <u>looking west along south side of property</u>
No. <u>262</u>	Description: <u>looking north along east side of property</u>

**Comments** Building 2121 - exterior downspouts discharge directly onto impervious surface  
Building 2125 - exterior downspouts; eastern portion of building discharges directly to storm drain.  
western portion discharges directly onto impervious surface.  
Building 2129 - roof is drained internally then to storm drain.  
It may be possible, appropriate and cost-effective to tie the storm drains to existing SWM facilities  
that are located to the north and south. Access to loading docks cannot be restricted.  
Although excess parking is available, site is graded to inlets surrounded by pavement.

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information**



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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 2 -- Site Information (concluded)**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 6

State Plane Coordinates of IMP / BMP Centroid: X: varies Y: varies

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.78 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>	
WQ <sub>v</sub> (provided): <u>unknown</u>	Re <sub>v</sub> (provided): <u>0.000</u>
Area Treated (ac): <u>0.78</u>	Impervious Area Treated (ac): <u>0.78</u>

**Photographs**

No. <u>272</u>	Description: <u>Building 2125</u>
No. <u>276</u>	Description: <u>Building 2129</u>
No. <u>280</u>	Description: <u>Building 2121</u>
No. _____	Description: _____

**Comments** Age and condition of buildings do not make green roofs feasible. No room for rain barrels/cisterns/planter boxes. Proximity of trees may make maintenance frequent.

Locations of IMPs:

1a: X=1398663, Y=482298

1b: X=1398393, Y=482264

1c: X=1398724, Y=482240

IMP/BMP Summary shows combined results for 1a, 1b and 1c.

IMP size = 34,097 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: 1398789 Y: 482349

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.28 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.008</u>	Re <sub>v</sub> (provided):	<u>0.008</u>
Area Treated (ac):	<u>0.12</u>	Impervious Area Treated (ac):	<u>0.09</u>

**Photographs**

No. <u>281</u>	Description: <u>looking east</u>
No. <u>282</u>	Description: <u>looking north</u>
No. <u>283</u>	Description: <u>looking west</u>
No. _____	Description: _____

**Comments**      A speed bump will be used to direct flow.  
Bioretention provides 43% treatment of drainage area as sized.  
IMP size = 655 sq ft  
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 \_\_\_\_\_  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 39

State Plane Coordinates of IMP / BMP Centroid: X: 1398740 Y: 482306

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.11 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.010</u>	Re <sub>v</sub> (provided):	<u>0.010</u>
Area Treated (ac):	<u>0.11</u>	Impervious Area Treated (ac):	<u>0.11</u>

**Photographs**

No. <u>284</u>	Description: <u>looking west</u>
No. <u>285</u>	Description: <u>looking south</u>
No. _____	Description: _____

**Comments**      "Speed bumps" (2) will be needed to direct flow. This IMP is downgradient of IMP #2.  
Bioretention provides 122% treatment of drainage area as sized.  
IMP size = 882 sq ft  
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 \_\_\_\_\_  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 60

State Plane Coordinates of IMP / BMP Centroid: X: varies Y: varies

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.33 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.026</u>	Re <sub>v</sub> (provided):	<u>0.026</u>
Area Treated (ac):	<u>0.33</u>	Impervious Area Treated (ac):	<u>0.33</u>

**Photographs**

No. <u>277</u>	Description: <u>looking south across 4c and 4d</u>
No. <u>278</u>	Description: <u>looking north across 4a and 4b</u>
No. <u>279</u>	Description: <u>looking south at 4f and 4g</u>
No. <u>286</u>	Description: <u>looking south across 4e</u>
No. _____	Description: _____

**Comments** This property has extensive traffic between Priest Bridge Road and Baldwin Avenue.

Locations of IMPs:

4a: X=1398835, Y=482173; 4b: X=1398666, Y=482167; 4c: X=1398432, Y=482180; 4d: X=1398250,

Y=482172; 4e: X=1398264, Y=482256; 4f: X=1398564, Y=482302; 4g: X=1398569, Y=482274

IMP/BMP Summary shows combined results for 4a, 4b, 4c, 4d, 4e, 4f and 4g.

IMP size = 14,377 sq ft

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1398366 Y: 482172

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.31 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.012</u>	Re <sub>v</sub> (provided):	<u>0.012</u>
Area Treated (ac):	<u>0.31</u>	Impervious Area Treated (ac):	<u>0.14</u>

**Photographs**

No. <u>273</u>	Description: <u>looking east</u>
No. <u>274</u>	Description: <u>looking south</u>
No. <u>275</u>	Description: <u>looking west</u>
No. _____	Description: _____

**Comments**

IMP size = 1,026 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1398140 Y: 482186

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.24 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.014</u>	Re <sub>v</sub> (provided):	<u>0.014</u>
Area Treated (ac):	<u>0.24</u>	Impervious Area Treated (ac):	<u>0.18</u>

**Photographs**

No. <u>268</u>	Description: <u>looking east</u>
No. <u>270</u>	Description: <u>looking south</u>
No. <u>271</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments** A speed bump will be needed to direct flow. Must avoid signs for redevelopment.  
IMP size = 1,264 sq ft  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 38

State Plane Coordinates of IMP / BMP Centroid: X: 1398124 Y: 482306

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: 0.05 ac 100%

### Retrofit of Existing SWM BMP

SDI ID: \_\_\_\_\_

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>			
WQ <sub>v</sub> (provided):	<u>0.004</u>	Re <sub>v</sub> (provided):	<u>0.004</u>
Area Treated (ac):	<u>0.05</u>	Impervious Area Treated (ac):	<u>0.05</u>

**Photographs**

No. <u>266</u>	Description: <u>looking south</u>
No. <u>267</u>	Description: <u>looking east</u>
No. <u>269</u>	Description: <u>looking north</u>
No. _____	Description: _____

**Comments** A speed bump will be needed to direct flow. Must avoid signs for redevelopment.  
IMP size = 344 sq ft

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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice

New LID IMP  SWM BMP Retrofit  New SWM BMP  Type (Sheets 4 & 5): 21

State Plane Coordinates of IMP / BMP Centroid: X: 1398177 Y: 482369

Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map

Identify all Impairments Addressed by Recommendation (Sheet 1): \_\_\_\_\_

Treatment Area Ownership:  Transportation ROW  Utility ROW  County  Other Government  Private  
 Other \_\_\_\_\_

Infrastructure / Structures / Buildings Impacted:  YES  NO

Limited Impact to Adjacent Properties:  YES  NO

Area Accessible for Construction:  YES  NO

Area Accessible for Maintenance:  YES  NO

Limited Permitting Issues:  YES  NO

Jurisdictional Wetlands Impacted:  YES  NO

Forest Retention Area Impacted:  YES  NO

Conservation Easement Impacted:  YES  NO

Utilities Present:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Utilities Impacted:  None  Natural Gas  Electric  Telephone  Cable  Water  Sewer  Other \_\_\_\_\_

Impacted Utilities:  Above Gound  Underground

Critical Area Impacted:  YES  NO

Mature / Specimen Trees Impacted:  YES  NO

Existing Landscaping Impacted:  YES  NO

Underdrain Needed:  YES  NO

Underdrains Can Discharge:  YES  NO

Soils are Suitable:  YES  NO

Ground Water Table Level Suitable:  YES  NO

Estimate IMP / BMP drainage area included on site: \_\_\_\_\_ ac 25%

### Retrofit of Existing SWM BMP

SDI ID: unknown

Add Forebay:  YES  NO

Modify Outlet Structure:  YES  NO

Add Aquatic Bench:  YES  NO

Grade Bottom of Facility:  YES  NO

Plant Native Vegetation:  YES  NO

Provide Additional Storage Volume:  YES  NO

Excavation / Raise the Embankment:  YES  NO

**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice (concluded)**

<b>IMP / BMP SUMMARY</b>	
WQ <sub>v</sub> (provided): _____	Re <sub>v</sub> (provided): _____
Area Treated (ac): _____	Impervious Area Treated (ac): _____

**Photographs**

No. <u>263</u>	Description: <u>looking east (upstream)</u>
No. <u>264</u>	Description: <u>looking south across west side of facility</u>
No. <u>265</u>	Description: <u>looking west (downstream)</u>
No. _____	Description: _____

**Comments** Direct storm drain into facility. Most critical components will be the removal of the concrete trickle ditch and planting vegetation appropriate to the hydrology. The functionality of the SWM facility should be assessed.  
IMP is a retrofit of existing stormwater management wetland. Drainage area and IMP/BMP Summary is not provided at this time.  
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**UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)  
FORM 3 -- Opportunities and Constraints of Potential Management Practice**



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